

1 **Proposed Changes to Title 14 CCR California Forest Practice Rules**

2 **Watercourse Rules Streamlining, 2006**

3 **Version 1_30_06**

4
5 **Edits recommended by FPC: RED TEXT**

6 **Edits recommended by CDF 1/27/06: BLUE TEXT**

7
8 **Amend 916.5(e), 936.5(e), 956.5(e) Procedure for Determining**
9 **Watercourse and Lake Protection Zone (WLPZ) Widths and Protective**
10 **Measures [All Districts]**

11 **(e)** The letter designations shown in the "Protective Measures and
12 Widths" column in Table I correspond to the following:

13 "A" WLPZ shall be clearly identified on the ground by the RPF who
14 prepared the plan, or supervised designee, with paint, flagging, or
15 other suitable means prior to the preharvest inspection. For
16 nonindustrial timber management plans, sample identification of the
17 WLPZ prior to the preharvest inspection may be allowed. The sample
18 shall be based upon a field examination and be consistent with the
19 applicable provisions of 14 CCR §§ 916.4 [936.4, 956.4] and 916.5
20 [936.5, 956.5], representing the range of conditions found within the
21 WLPZ. The Director shall determine if the sample identification is
22 adequate for plan evaluation during the preharvest inspection. If
23 sample identification is allowed, the remaining WLPZ shall be
24 identified by an RPF or supervised designee prior to the start of
25 timber operations within or adjacent to the WLPZ. The Department
shall be notified when the WLPZ has been identified and may review the

1 WLPZ identification prior to the start of timber operations to
2 determine whether it is consistent with the sample marking and the
3 rules of the Board.

4 "B" WLPZ shall be clearly identified on the ground by an RPF⁷ or
5 supervised designee, with paint, flagging, or other suitable means,
6 prior to the start of timber operations. In watersheds with
7 threatened or impaired values, on the ground identification of the
8 WLPZ shall be completed prior to the preharvest inspection. For all
9 nonindustrial timber management plans, sample identification of the
10 WLPZ prior to the preharvest inspection may be allowed. The sample
11 shall be based upon a field examination and be consistent with the
12 applicable provisions of 14 CCR §§ 916.4 [936.4, 956.4] and 916.5
13 [936.5, 956.5], representing the range of conditions found within the
14 WLPZ. The Director shall determine if the sample identification is
15 adequate for plan evaluation during the preharvest inspection. If
16 sample identification is allowed, the remaining WLPZ shall be
17 identified by an RPF or supervised designee prior to the start of
18 timber operations within or adjacent to the WLPZ. The Department
19 shall be notified when the WLPZ has been identified and may review the
20 WLPZ identification prior to the start of timber operations to
21 determine whether it is consistent with the sample marking and the
22 rules of the Board.

23 "C" In site-specific cases, the RPF may provide in the plan, or
24 the Director may require, that the WLPZ be clearly identified on the
25 ground with flagging or by other suitable means prior to the start of
timber operations.

1 **"D"** To ensure retention of shade canopy filter strip properties
2 of the WLPZ and the maintenance of a multi-storied stand for
3 protection of values described in 14 CCR 916.4(b) [936.4(b),
4 956.4(b)], ~~a base mark below the outline of residual or harvest trees~~
5 ~~within the zone shall be done in advance of the preharvest inspection~~
6 ~~by the RPF or supervised designee. residual or harvest trees shall be~~
7 ~~marked, including a base mark below the cut line within the WLPZ.~~
8 Outside of watersheds with threatened or impaired values, sample
9 marking prior to the preharvest inspection is satisfactory in those
10 cases where the Director determines it is adequate for plan
11 evaluation. When sample marking has been used, all marking shall be
12 done in advance of falling operations in the WLPZ. In watersheds with
13 threatened or impaired values, trees shall be marked in advance of the
14 preharvest inspection. ~~by the RPF, or supervised designee.~~ For all
15 nonindustrial timber management plans, sample marking of the WLPZ
16 prior to the preharvest inspection may be allowed. The sample shall
17 be based upon a field examination and shall be consistent with the
18 applicable provisions of 14 CCR §§ 916.4 [936.4, 956.4] and 916.5
19 [936.5, 956.5], representing the range of conditions found within the
20 WLPZ. The Director shall determine if the sample mark is adequate for
21 plan evaluation during the preharvest inspection. If sample marking
22 is allowed, the remaining WLPZ shall be marked by an RPF, or
23 supervised designee, prior to the start of timber operations within or
24 adjacent to the WLPZ. The Department shall be notified when the WLPZ
25 has been marked and may review the WLPZ identification prior to the
start of timber operations to determine whether it is consistent with

1 the sample marking and the rules of the Board.

2 "E" To ensure retention of shade canopy filter strip properties
3 of the WLPZ and the maintenance of ~~wildlife~~-a multi-storied stand for
4 protection of values described in 14 CCR 916.4(b) [936.4(b),
5 956.4(b)], ~~a base mark shall be placed below the outline of the~~
6 ~~residual or harvest trees within the zone and shall be done in advance~~
7 ~~of timber falling operations by the RPF or supervised designee.~~
8 residual or harvest trees shall be marked, including a base mark below
9 the cut line, within the WLPZ by the RPF or supervised designee.

10 Outside of watersheds with threatened or impaired values, tree marking
11 shall be done prior to timber falling operations. In watersheds with
12 threatened or impaired values, trees shall be marked in advance of the
13 preharvest inspection. ~~by the RPF, or supervised designee.~~ For all
14 nonindustrial timber management plans, sample marking of the WLPZ
15 prior to the preharvest inspection may be allowed. The sample shall
16 be based upon a field examination and shall be consistent with the
17 applicable provisions of 14 CCR §§ 916.4 [936.4, 956.4] and 916.5
18 [936.5, 956.5], representing the range of conditions found within the
19 WLPZ. The Director shall determine if the sample mark is adequate for
20 plan evaluation during the preharvest inspection. If sample marking
21 is allowed, the remaining WLPZ shall be marked by an RPF or supervised
22 designee prior to the start of timber operations within or adjacent to
23 the WLPZ. The Department shall be notified when the WLPZ has been
24 marked and may review the WLPZ identification prior to the start of
25 timber operations to determine whether it is consistent with the
sample marking and the rules of the Board.

1 **"F"** Residual or harvest tree marking within the WLPZ may be
2 stipulated in the THP by the RPF or required by the Director in site-
3 specific cases to ensure retention of filter strip properties or to
4 maintain soil stability of the zone. The RPF shall state in the THP
5 if marking was used in these zones.

6 **"G"** To protect water temperature, filter strip properties,
7 upslope stability, and fish and wildlife values, at least 50% of the
8 overstory and 50% of the understory canopy covering the ground and
9 adjacent waters shall be left in a well distributed multi-storied
10 stand composed of a diversity of species similar to that found before
11 the start of operations. The residual overstory canopy shall be
12 composed of at least 25% of the existing overstory conifers. Species
13 composition may be adjusted consistent with the above standard to meet
14 on-site conditions when agreed to in the THP by the RPF and the
15 Director.

16 **"H"** At least 50% of the understory vegetation present before
17 timber operations shall be left living and well distributed within the
18 WLPZ to maintain soil stability. This percentage may be adjusted to
19 meet on-site conditions when agreed to in the THP by the RPF and the
20 Director. Unless required by the Director, this shall not be construed
21 to prohibit broadcast burning with a project type burning permit for
22 site preparation.

23 **"I"** To protect water temperature, filter strip properties,
24 upslope stability, and fish and wildlife values, at least 50% of the
25 total canopy covering the ground shall be left in a well distributed
multi-storied stand configuration composed of a diversity of species

1 similar to that found before the start of operations. The residual
2 overstory canopy shall be composed of at least 25% of the existing
3 overstory conifers. Due to variability in Class II watercourses these
4 percentages and species composition may be adjusted to meet on-site
5 conditions when agreed to by the RPF and the Director in the THP.

6
7 **Amend 916.9, 936.9, 956.9 Protection and Restoration in Watersheds**
8 **with Threatened or Impaired Values [All Districts]**

9 (e) Channel zone requirements

10 (1) There shall be no timber operations within the channel
11 zone with the following exceptions:

12 (A) timber harvesting that is directed to improve
13 salmonid habitat through the limited use of the selection or
14 commercial thinning silvicultural methods with review and comment by
15 DFG.

16 (B) timber harvesting necessary for the construction
17 or reconstruction of approved watercourse crossings.

18 (C) timber harvesting necessary for the protection of
19 public health and safety.

20 (D) to allow for full suspension cable yarding when
21 necessary to transport logs through the channel zone.

22 (E) Class III watercourses where exclusion of timber
23 operations is not needed for protection of listed salmonids.

24 (2) In all instances where trees are proposed to be felled
25 within the channel zone, a base mark shall be placed below the cut
line of the harvest trees within the zone. Such marking shall be
completed by the RPF that prepared the plan prior to the preharvest
inspection.

(f) Subsections (f)(1) through (f)(5) apply to those watercourse
reaches where anadromous salmonids are always or seasonally present
and to those watercourse reaches where anadromy is limited, but can be
feasibly restored as identified by a DFG biologist or as further
identified and refined during preparation and review of the plan.

OPTION 1: In the event that written comments received from an agency
listed in PRC §4582.6 and 14 CCR § 1037.3, and which participated in

1 review of the plan, lead to the conclusion that the application of one
2 or more of these subsections is necessary to conform with 14 CCR §§
3 916.2[936.2, 956.2] (a) and 916.9[936.9, 956.9] (a), the Director
4 shall require that the specific protection measure(s) be made part of
5 the plan.

6 ~~(f)~~(1) The minimum WLPZ width for Class I waters shall be
7 150 feet from the watercourse or lake transition line. Where a
8 proposed THP is located within the Sacramento or San Joaquin river
9 drainages, and the Director and DFG concur; the RPF may explain and
10 justify other WLPZ widths on areas where even aged regeneration
11 methods, seed tree removal, shelterwood removal, alternative
12 prescriptions, or rehabilitation will not be utilized adjacent to
13 watercourse and lake protection zones and where slopes are less than
14 30%.

15 ~~(g)~~(2) Within a WLPZ for Class I waters, at least 85
16 percent overstory canopy shall be retained within 75 feet of the
17 watercourse or lake transition line, and at least 65 percent overstory
18 canopy within the remainder of the WLPZ. The overstory canopy must be
19 composed of at least 25% overstory conifer canopy post-harvest. Where
20 a proposed THP is located within the Sacramento or San Joaquin river
21 drainages, and the Director and DFG concur; the RPF may explain and
22 justify other canopy retention standards on areas where even aged
23 regeneration methods, seed tree removal, shelterwood removal,
24 alternative prescriptions, or rehabilitation will not be utilized
25 adjacent to watercourse and lake protection zones and where slopes are
less than 30%.

1 Harvesting of hardwoods shall only occur for the purpose of
2 enabling conifer regeneration.

3 ~~(h)~~(3) For Class I waters, any plan involving timber
4 operations within the WLPZ shall contain the following information:

5 ~~(1)~~(A) A clear and enforceable specification of how
6 any disturbance or log or tree cutting and removal within the Class I
7 WLPZ shall be carried out to conform with 14 CCR 916.2 [936.2,
8 956.2](a) and 916.9 [936.9, 956.9](a).

9 ~~(2)~~(B) A description of all existing permanent
10 crossings of Class I waters by logging roads and clear specification
11 regarding how these crossings are to be modified, used, and treated to
12 minimize risks, giving special attention to allowing fish to pass both
13 upstream and downstream during all life stages.

14 ~~(3)~~(C) Clear and enforceable specifications for
15 construction and operation of any new crossing of Class I waters to
16 prevent direct harm, habitat degradation, water velocity increase,
17 hindrance of fish passage, or other potential impairment of beneficial
18 uses of water.

19 ~~(i)~~(4) Recruitment of large woody debris for aquatic
20 habitat in Class I anadromous fish-bearing or restorable waters shall
21 be ensured by retaining the ten largest dbh conifers (live or dead)
22 per 330 feet of stream channel length that are the most conducive to
23 recruitment to provide for the beneficial functions of riparian zones.
24 The retained conifers shall be selected from within the THP area that
25 lies within 50 feet of the watercourse transition line. Where the THP
boundary is an ownership boundary, a class I watercourse, and the

1 WLPZ on both sides of the watercourse currently meets the stocking
2 standards listed under 14 CCR 912.7[932.7,952.7](b)(2)}; the five (5)
3 largest dbh conifers (live or dead) per 330 feet of stream channel
4 length that are the most conducive to recruitment to provide for the
5 beneficial functions of riparian zones within the THP area shall be
6 retained within 50 feet of the watercourse transition line.

7 The RPF may propose alternatives to substitute smaller diameter
8 trees, trees that are more than 50 feet from the watercourse
9 transition line, or other alternatives on a site specific basis. The
10 RPF must explain and justify in the THP why the proposed alternative
11 is more conducive to current and long-term Large Woody Debris
12 recruitment, shading, bank stability, and the beneficial functions of
13
14 riparian zones.

15 ~~(j)~~(5) Where an inner gorge extends beyond a Class I WLPZ
16 and slopes are greater than 55%, a special management zone shall be
17 established where the use of evenaged regeneration methods is
18 prohibited. This zone shall extend upslope to the first major break-
19 in-slope to less than 55% for a distance of 100 feet or more, or 300
20 feet as measured from the watercourse or lake transition line, which
21 ever is less. All operations on slopes exceeding 65% within an inner
22 gorge of a Class I or II watercourse shall be reviewed by a Registered
23 Geologist prior to plan approval, regardless of whether they are
24 proposed within a WLPZ or outside of a WLPZ.

25 ~~(k)~~(g) From October 15 to May 1, the following shall apply: (1)
no timber operations shall take place unless the approved plan

1 incorporates a complete winter period operating plan pursuant to 14
2 CCR 914.7(a) [934.7(a), 954.7(a)], (2) unless the winter period
3 operating plan proposes operations during an extended period with low
4 antecedent soil wetness, no tractor roads shall be constructed,
5 reconstructed, or used on slopes that are over 40 percent and within
6 200 feet of a Class I, II, or III watercourse, as measured from the
7 watercourse or lake transition line, and (3) operation of trucks and
8 heavy equipment on roads and landings shall be limited to those with a
9 stable operating surface.

10 ~~(1)~~ (h) Construction or reconstruction of logging roads, tractor
11 roads, or landings shall not take place during the winter period
12 unless the approved plan incorporates a complete winter period
13 operating plan pursuant to 14 CCR 914.7(a) that specifically address
14 such road construction. Use of logging roads, tractor roads, or
15 landings shall not take place at any location where saturated soil
16 conditions exist, where a stable logging road or landing operating
17 surface does not exist, or when visibly turbid water from the road,
18 landing, or skid trail surface or inside ditch may reach a watercourse
19 or lake. Grading to obtain a drier running surface more than one time
20 before reincorporation of any resulting berms back into the road
21 surface is prohibited.

22 ~~(m)~~ (i) All tractor roads shall have drainage and/or drainage
23 collection and storage facilities installed as soon as practical
24 following yarding and prior to either (1) the start of any rain which
25 causes overland flow across or along the disturbed surface within a
WLPZ or within any ELZ or EEZ designated for watercourse or lake

1 protection, or (2) any day with a National Weather Service forecast of
2 a chance of rain of 30 percent or more, a flash flood warning, or a
3 flash flood watch.

4 ~~(n)~~ (j) Within the WLPZ, and within any ELZ or EEZ designated for
5 watercourse or lake protection, treatments to stabilize soils,
6 minimize soil erosion, and prevent the discharge of sediment into
7 waters in amounts deleterious to aquatic species or the quality and
8 beneficial uses of water, or that threaten to violate applicable water
9 quality requirements, shall be applied in accordance with the
10 following standards:

11 (1) The following requirements shall apply to all such
12
13
14 treatments.

15 (A) They shall be described in the plan.

16 (B) For areas disturbed from May 1 through October 15,
17 treatment shall be completed prior to the start of any rain that
18 causes overland flow across or along the disturbed surface.

19 (C) For areas disturbed from October 16 through April
20 30, treatment shall be completed prior to any day for which a chance
21 of rain of 30 percent or greater is forecast by the National Weather
22 Service or within 10 days, whichever is earlier.

23 (2) The traveled surface of logging roads shall be treated
24 to prevent waterborne transport of sediment and concentration of
25 runoff that results from timber operations.

(3) The treatment for other disturbed areas, including: (A)

1 areas exceeding 100 contiguous square feet where timber operations
2 have exposed bare soil, (B) approaches to tractor road watercourse
3 crossings between the drainage facilities closest to the crossing, (C)
4 road cut banks and fills, and (D) any other area of disturbed soil
5 that threatens to discharge sediment into waters in amounts
6 deleterious to the quality and beneficial uses of water, may include,
7 but need not be limited to, mulching, rip-rapping, grass seeding, or
8 chemical soil stabilizers. Where straw, mulch, or slash is used, the
9 minimum coverage shall be 90%, and any treated area that has been
10 subject to reuse or has less than 90% surface cover shall be treated
11 again prior to the end of timber operations. The RPF may propose
12 alternative treatments that will achieve the same level of erosion
13
14 control and sediment discharge prevention.

15 (4) Where the undisturbed natural ground cover cannot
16 effectively protect beneficial uses of water from timber operations,
17 the ground shall be treated by measures including, but not limited to,
18 seeding, mulching, or replanting, in order to retain and improve its
19 natural ability to filter sediment, minimize soil erosion, and
20 stabilize banks of watercourses and lakes.

21 ~~(g)~~ (k) As part of the plan, the RPF shall identify active erosion
22 sites in the logging area, assess them to determine which sites pose
23 significant risks to the beneficial uses of water, assess them to
24 determine whether feasible remedies exist, and address in the plan
25 feasible remediation for all sites that pose significant risk to the
beneficial uses of water.

1 ~~(p)~~(l) The erosion control maintenance period on permanent and
2 seasonal roads and associated landings that are not abandoned in
3 accordance with 14 CCR 923.8 shall be three years.

4 ~~(q)~~(m) Site preparation activities shall be designed to prevent
5 soil disturbance within, and minimize soil movement into, the channels
6 of watercourses. Prior to any broadcast burning, burning prescriptions
7 shall be designed to prevent loss of large woody debris in
8 watercourses, and vegetation and duff within a WLPZ, or within any ELZ
9 or EEZ designated for watercourse or lake protection. No ignition is
10 to occur within any WLPZ, or within any ELZ or EEZ designated for
11 watercourse or lake protection. When burning prescriptions are
12 proposed, the measures or burning restrictions which are intended to
13
14 accomplish this goal shall be stated in the plan and included in any
15 required burning permit. This information shall be provided in
16 addition to the information required under 14 CCR 915.4.

17 ~~(r)~~(n) Water drafting for timber operations from within a channel
18 zone of a natural watercourse or from a lake shall conform with the
19 following standards:

20 (1) The RPF shall incorporate into the THP:

21 (A) a description and map of proposed water drafting
22 locations,

23 (B) the watercourse or lake classification, and

24 (C) the general drafting location use parameters
25 (i.e., yearly timing, estimated total volume needed, estimated total
uptake rate and filling time, and associated water drafting activities

1 from other THPs).

2 (2) On Class I and Class II streams where the RPF has
3 estimated that:

4 (A) bypass flows are less than 2 cubic feet per
5 second, or

6 (B) pool volume at the water drafting site would be
7 reduced by 10%, or

8 (C) diversion rate exceeds 350 gallons per minute, or

9 (D) diversion rate exceeds 10% of the above surface
10 flow;

11 no water drafting shall occur unless the RPF prepares a water drafting
12 plan to be reviewed and, if necessary a stream bed alteration

13
14 agreement issued, by DFG and approved by the Director. The Director
15 may accept the project description and conditions portion of an
16 approved "Streambed Alteration Agreement" issued under the Fish and
17 Game Code (F&GC 1600 et seq.) which is submitted instead of the water
18 drafting plan described in 14 CCR §916.9(r)(2)(D)(1-5).

19 The water drafting plan shall include, but not be limited to:

20 1. disclosure of estimated percent streamflow reduction and duration
21 of reduction,

22 2. discussion of the effects of single pumping operations, or multiple
23 pumping operations at the same location,

24 3. proposed alternatives and discussion to prevent adverse effects
25 (e.g. reduction in hose diameter, reduction in total intake at one
location, described allowances for recharge time, and alternative

water drafting locations),

4. conditions for operators to include an operations log kept on the water truck containing the following information: Date, Time, Pump Rate, Filling Time, Screen Cleaned, Screen Conditions, and Bypass flow observations,

5. a statement by the RPF for a pre-operations field review with the operator to discuss the conditions in the water drafting plan.

(3) Intakes shall be screened in Class I and Class II waters. Screens shall be designed to prevent the entrainment or impingement of all life stages of fish or amphibians. Screen specifications shall be included in the plan.

(4) Approaches to drafting locations within a WLPZ shall be surfaced with rock or other suitable material to avoid generation of sediment.

~~(s)(o)~~ No timber operations are allowed in a WLPZ, or within any ELZ or EEZ designated for watercourse or lake protection, under ~~emergency notices or~~ exemption notices except for:

(1) hauling on existing roads,

(2) road maintenance,

(3) operations conducted for public safety,

(4) construction or reconstruction of approved watercourse crossings,

(5) temporary crossings of dry Class III watercourses which do not require a "Streambed Alteration Agreement" under the Fish and Game Code; or

~~(6) forest conditions requiring harvesting that is approved~~

1 ~~by a letter of concurrence from DFG harvesting recommended in writing~~
2 ~~by DFG to address specifically identified forest conditions.~~

3 (p) No timber operations are allowed in a WLPZ, or within any
4 ELZ or EEZ designated for watercourse or lake protection, under
5 emergency notices except for:

6 (1) hauling on existing roads,
7 (2) road maintenance,
8 (3) operations conducted for public safety,
9 (4) construction or reconstruction of approved watercourse
10 crossings,
11 (5) temporary crossings of dry Class III watercourses which
12 do not require a "Streambed Alteration Agreement" under the Fish and
13 Game Code,

14 ~~(6) forest conditions requiring harvesting that is approved~~
15 ~~by a letter of concurrence from DFG harvesting recommended in writing~~
16 ~~by DFG to address specifically identified forest conditions,~~

17 (7) the harvest of dead, or dying, or diseased conifer
18 trees subject to the following conditions:

19 (A) The provisions of 14 CCR § 1052(b) apply,
20 including, but not limited to, channel zone standards within 14 CCR §
21 916[936, 956].9(e) and large woody debris retention requirements
22 within under 14 CCR § 916[936, 956].3(g) and 14 CCR § 916[936,
23 956].9(i).

24
25 (B) Within any WLPZ, ELZ, or EEZ designated for Class
III watercourse protection, a minimum of two dead, dying, or diseased

conifer trees per acre at least 16 inches diameter breast high and 50 feet tall shall be retained within 50 feet of the watercourse transition line.

(C) Trees to be harvested or retained shall be marked by, or under the supervision of, an RPF prior to timber operations within the WLPZ or ELZ/EEZ.

(D) Within the WLPZ or ELZ/EEZ, if the stocking standards of 14 CCR § 912[932, 952].7 are not met upon completion of timber operations, unless the area meets the definition of substantially damaged timberlands, at least ten trees shall be planted for each tree harvested but need not exceed an average point count of 300 trees per acre ~~(741.3 per ha)~~.

~~(t)~~(g) No salvage logging is allowed in a WLPZ without an approved HCP, an SYP, or an approved plan that contains a section that sets forth objectives, goals, and measurable results for streamside salvage operations.

~~(u)~~(r) Nonstandard practices (i.e., waivers, exceptions, in-lieu practices, and alternative practices) shall comply with the goal set forth in subsection (a) above as well as with the other requirements set forth in the rules.

~~(v)~~(s) The Director may approve alternatives provided the alternative practice will achieve the goal of this section. The Director shall not accept for inclusion in a plan any alternative practice as described in this section where two or more agencies listed in 4582.6 of the PRC and 14 CCR 1037.3 have submitted written comments which lead to the Director's conclusion that the proposed

1 alternative will not meet the goal of this section and the agency(ies)
2 participated in the review of the plan, including an on-the-ground
3 inspection.

4 ~~(w)~~(t) Other measures that would effectively achieve the goal set
5 forth in 14 CCR 916.9(a) may be approved in accordance with 14 CCR
6 916.6.

7 ~~(*)~~(u) The provisions of 14 CCR 916.9 shall not apply to a plan
8 that is subject to an incidental take permit based upon an approved
9 Habitat Conservation Plan that addresses anadromous salmonid
10 protection.

11 ~~(y)~~(v) This section shall expire on December 31, 2006.

12
13
14 Version 1_30_06
15
16
17
18
19
20
21
22
23
24
25